

RL



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/933,012	08/21/2001	Richard Walker	11818-2	6071

7590 12/07/2004

Bhupinder S. Randhawa
Bareskin & Parr
Box 401
40 King Street West
Toronto, ON M5H 3Y2
CANADA

EXAMINER

SMITH, PETER J

ART UNIT	PAPER NUMBER
----------	--------------

2176

DATE MAILED: 12/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/933,012

Applicant(s)

WALKER ET AL.

Examiner

Peter J Smith

Art Unit

2176

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date. _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to communications: application filed 8/21/2001, priority application filed 8/21/2000.
2. Claims 1-40 are pending in the case. Claims 1, 8, 15, 31, and 32 are independent claims.

Specification

3. The abstract of the disclosure is objected to because it is too long. The abstract should be 150 words or less. Correction is required. See MPEP § 608.01(b).

Claim Objections

4. Claims 31 and 38 are objected to because of the following informalities: The claims appear to the Examiner to be incomplete. In claim 31, the last limitation ends with the word “wherein” and no limitations follow. Claim 31 is not terminated by a period, leading the Examiner to believe the claim was not fully completed. In claim 37, which is similar to claim 38, the link is directed to each of said primary data containers whereas in claim 38 the link is not directed towards anything in particular. Claim 38 also has no period to terminate the claim. For these reasons the Examiner believes claims 31 and 38 are not fully complete as Applicant may have intended. Appropriate correction is required.
5. Claims 26 and 34 are objected to under 37 CFR 1.75(c) as being in improper form because the Examiner does not understand what “A2” refers to in claim 26 or what “G2” refers to in claim 34. See MPEP § 608.01(n).

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. **Claims 1, 6-7, and 15-40 are rejected under 35 U.S.C. 102(e) as being anticipated by Bray et al. (hereinafter “Bray”), US 6,529,905 B1 filed 1/11/2000.**

Regarding independent claim 1, Bray discloses a structure document representation which is divided into two or more sections in fig. 3. Bray discloses storing each of the sections in a separate container, which Bray calls a node, wherein each of the containers may be locked by one of the users in col. 5 lines 4-31. Bray discloses locking one of the containers at the request of the first user and allowing the first user to edit the section of the document stored within the one container in col. 4 line 53 – col. 5 line 3. Bray discloses locking another of the containers at the request of the second user and allowing the second user to edit the section of the document stored within the other container in col. 2 lines 54-62 and col. 6 lines 55-57.

Regarding dependent claim 6, Bray discloses allowing the first user to specify the one container, ensuring that the one container is not already locked by any user, and identifying the one container as being locked by the first user in col. 4 line 53 – col. 5 line 3.

Regarding dependent claim 7, Bray discloses allowing the first user to specify the one container, ensuring that the one container is not already locked by any user other than the first

Art Unit: 2176

user, and identifying the one container as being locked by the first user in col. 4 line 53 – col. 5 line 3.

Regarding independent claim 15, Bray discloses hierarchical document structure which enables the specifying of a primary section type corresponding to a primary data type and dividing the primary data into one or more sections corresponding to the section type in fig. 3 and col. 4 line 53 – col. 5 line 31. Bray discloses storing each of the sections in a primary data container, which Bray calls a node, wherein each of the primary data containers includes a field for indicating whether the container has an editing lock set for it in col. 4 line 53 – col. 5 line 31.

Regarding dependent claim 16, Bray discloses storing a parent container for the document, the parent container being linked, directly or indirectly, to each of the primary data containers in fig. 3 and col. 4 line 53 – col. 5 line 31.

Regarding dependent claim 17, Bray discloses storing document information relating to the document in the parent container in col. 4 line 53 – col. 5 line 31.

Regarding dependent claim 18, Bray discloses wherein the document information includes the title of the document in col. 5 line 30.

Regarding dependent claim 19, Bray discloses storing XML document information relating to the document in the parent container in col. 4 line 53 – col. 5 line 31. The XML document metadata information includes one or more of items selected from the list consisting of a description of the document, keywords relating to the document, and a full or partial history of editing changes relating to the document.

Regarding dependent claim 20, Bray discloses wherein the document is a text document and wherein the primary data containers are formed into a linked list having a head

Art Unit: 2176

primary data container and a tail primary data container and wherein the parent container contains a link to the head primary data container in col. 4 line 53 – col. 5 line 31.

Regarding dependent claim 21, Bray discloses wherein the document information includes one or more default text attributes for the document in col. 4 line 53 – col. 5 line 31.

Regarding dependent claim 22, Bray discloses wherein the document information further includes a format for the document in col. 4 line 53 – col. 5 line 31.

Regarding dependent claim 23, Bray discloses the section type is a paragraph in fig. 3 and col. 4 line 53 – col. 5 line 31.

Regarding dependent claim 24, Bray discloses wherein the parent container is linked directly to the primary data containers in col. 4 line 53 – col. 5 line 31.

Regarding dependent claim 25, Bray discloses wherein the document is a presentation document and wherein the primary data type is a slide in col. 4 line 53 – col. 5 line 31.

Regarding dependent claim 26, Bray discloses specifying a secondary section type corresponding to a secondary data type and dividing the embedded data into one or more embedded sections corresponding to secondary section types in fig. 3 and col. 4 line 53 – col. 5 line 31. Bray discloses storing each of the sections in an embedded data container, wherein each of the secondary data containers includes a field for indicating whether the container has an editing lock set for it in col. 4 line 53 – col. 5 line 31. Bray discloses wherein each of the embedded containers is a direct or indirect child of a primary data container in fig. 3 and col. 4 line 53 – col. 5 line 31.

Regarding dependent claim 27, Bray discloses specifying a secondary section type corresponding to a secondary data type and dividing the embedded data into one or more

Art Unit: 2176

embedded sections corresponding to secondary section types in fig. 3 and col. 4 line 53 – col. 5 line 31. Bray discloses storing each of the sections in an embedded data container, wherein each of the secondary data containers includes a field for indicating whether the container has an editing lock set for it in col. 4 line 53 – col. 5 line 31. Bray discloses wherein each of the embedded containers is a direct or indirect child of a primary data container in fig. 3 and col. 4 line 53 – col. 5 line 31.

Regarding dependent claim 28, Bray discloses wherein each embedded container includes a window field specifying how the embedded data stored in the embedded data container is to be displayed with respect to the primary data stored in the primary data container of which the embedded container is a child in fig. 3 and col. 4 line 53 – col. 5 line 31.

Regarding dependent claim 29, Bray discloses wherein the window field specifies the dimensions of a window in which the embedded data stored in the embedded data container is to be displayed in fig. 3 and col. 4 line 53 – col. 5 line 31.

Regarding dependent claim 30, Bray discloses wherein the window field further specifies a horizontal offset and a vertical offset at which said window is to be displayed from an anchor point of the primary data stored in the primary data container of which the embedded container is a child in fig. 3 and col. 4 line 53 – col. 5 line 31.

Regarding independent claim 31, Bray discloses a network, a workspace server coupled to the network, a client coupled to the network, and file system for storing the documents in fig. 1 and col. 2 line 66 – col. 3 line 52.

Regarding independent claim 32, Bray discloses one or more primary data containers, which Bray calls nodes, for storing a section of a document in fig. 3 and col. 4 line 53 – col. 5

Art Unit: 2176

line 31. Bray discloses wherein each primary data container stores a mutually exclusive section in fig. 3 and col. 4 line 53 – col. 5 line 31. Bray discloses wherein each of the primary data containers includes a field for indication whether an editing lock has been set for the container in col. 6 line 60 – col. 7 line 67. Bray discloses a parent container having a direct or indirect link to each of the primary data containers in fig. 3 and col. 4 line 53 – col. 5 line 31.

Regarding dependent claim 33, Bray discloses wherein the primary data containers collectively store all sections of the document in fig. 3 and col. 4 line 53 – col. 5 line 31.

Regarding dependent claim 34, Bray discloses wherein the document is a text document, wherein the primary data containers form a linked list having a head primary data container and wherein the parent container maintains a direct link to the head primary data container in fig. 3 and col. 4 line 53 – col. 5 line 31.

Regarding dependent claim 35, Bray discloses wherein the linked list has a tail primary data container and wherein the parent container maintains a direct link to the tail primary data container in col. 4 line 53 – col. 5 line 31.

Regarding dependent claim 36, Bray discloses wherein the document is a text document, wherein the primary data containers form a linked list having a head primary data container and wherein the parent container maintains a direct link to the head primary data container in col. 4 line 53 – col. 5 line 31.

Regarding dependent claim 37, Bray discloses wherein the parent container maintains a direct link to each of the primary data containers in col. 4 line 53 – col. 5 line 31.

Regarding dependent claim 38, Bray discloses wherein the parent container maintains a link in col. 4 line 53 – col. 5 line 31.

Regarding dependent claim 39, Bray discloses wherein the data structure includes two or more such parent containers, each of the parent containers being at the head of a document sub-tree, each document relating to a separate document, and each of the document sub-trees including one or more such primary data containers in col. 4 line 53 – col. 5 line 31.

Regarding dependent claim 40, Bray discloses wherein the data structure further includes a root container, wherein each of the parent containers is a child of the root container in fig. 3 and col. 4 line 53 – col. 5 line 31.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. **Claims 2-5 and 8-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bray et al. (hereinafter “Bray”), US 6,529,905 B1 filed 1/11/2000 in view of Brown et al. (hereinafter “Brown”), US 6,067,551 filed 11/14/1997.**

Regarding dependent claim 2, Bray teaches wherein the first user directly modifies the content element in col. 2 lines 54-62 and col. 4 line 53 – col. 5 line 3. The content element is an element of the master file by default since there is only one copy of the document. Brown teaches a simultaneous multi-user document editing system which does employ a master file and user local copy files. Brown teaches receiving a modified version of the content from a user and modifying the master copy of the content in accordance with the modified version in fig. 2.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined Brown into Bray to have created the claimed invention. It would have been obvious and desirable to have used a master copy/local user copy system as taught in Brown to have enhanced the simultaneous multi-user document editor of Bray so that users edited a local copy of a locked content group and then copied the changes to the master copy after completing editing and releasing the lock on the content. This modification would have enhanced the file recovery and protected from file corruption in the event of system failure as is taught by Brown in col. 4 lines 35-39.

Regarding dependent claim 3, Bray teaches wherein the first user directly modifies the content element in col. 2 lines 54-62 and col. 4 line 53 – col. 5 line 3. The content element is an element of the master file by default since there is only one copy of the document. Brown teaches a simultaneous multi-user document editing system which does employ a master file and user local copy files. Brown teaches broadcasting the modified master copy to the second user in fig. 2.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined Brown into Bray to have created the claimed invention. It would have been obvious and desirable to have used a master copy/local user copy system as taught in Brown to have enhanced the simultaneous multi-user document editor of Bray so that users edited a local copy of a locked content group and then copied the changes to the master copy after completing editing and releasing the lock on the content. This modification would have enhanced the file recovery and protected from file corruption in the event of system failure as is taught by Brown in col. 4 lines 35-39.

Regarding dependent claim 4, Bray teaches unlocking the one container after the master copy is modified in col. 2 lines 54-62 and col. 4 line 53 – col. 5 line 3.

Regarding dependent claim 5, Bray teaches after unlocking the one container, locking the one container at the request of the second user and allowing the second user to edit the one container in col. 2 lines 54-62.

Regarding independent claim 8, Bray teaches allowing a first user to select a section of a document and attempting to lock a selected container within the document sub-tree corresponding to the selected section in col. 4 line 53 – col. 5 line 3. Bray discloses allowing the first user to edit the locked section to produce modified content in the locked section in col. 4 line 53 – col. 5 line 3. In Bray, the user directly modifies the content of the document. The content element is an element of the master file by default since there is only one copy of the document. Therefore, Bray does not teach obtaining an up-to-date local copy of a document sub-tree corresponding to the document, wherein the local copy corresponds to a master copy of the document sub-tree or posting a modified version of the locked section to a workspace server, wherein the workspace server is configured to modify the master copy of the document sub-tree to correspond to the modified version.

Brown does teach obtaining an up-to-date local copy of a document wherein the local copy corresponds to a master copy of the document and posting a modified version of the content to a workspace server, wherein the workspace server is configured to modify the master copy of the document to correspond to the modified version in fig. 2. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined Brown into Bray to have created the claimed invention. It would have been obvious and desirable to have used a

Art Unit: 2176

master copy/local user copy system as taught in Brown to have enhanced the simultaneous multi-user document editor of Bray so that users edited a local copy of a locked content group and then copied the changes to the master copy after completing editing and releasing the lock on the content. This modification would have enhanced the file recovery and protected from file corruption in the event of system failure as is taught by Brown in col. 4 lines 35-39.

Regarding dependent claim 9, Bray teaches wherein the first user directly modifies the content element in col. 2 lines 54-62 and col. 4 line 53 – col. 5 line 3. The content element is an element of the master file by default since there is only one copy of the document. Brown teaches a simultaneous multi-user document editing system which does employ a master file and user local copy files. Brown teaches obtaining an initial up-to-date local copy of the document, receiving one or more Update messages, and modifying the local copy of the identified containers in accordance with the Update message, to update the local copy to an up-to-date condition in fig. 2.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined Brown into Bray to have created the claimed invention. It would have been obvious and desirable to have used a master copy/local user copy system as taught in Brown to have enhanced the simultaneous multi-user document editor of Bray so that users edited a local copy of a locked content group and then copied the changes to the master copy after completing editing and releasing the lock on the content. After the master copy is altered, the updated contents would have then been sent to the other users so that all clients would have had an up-to-date view of the document. This modification would have enhanced the file

Art Unit: 2176

recovery and protected from file corruption in the event of system failure as is taught by Brown in col. 4 lines 35-39.

Regarding dependent claim 10, , Bray teaches wherein the first user directly modifies the content element in col. 2 lines 54-62 and col. 4 line 53 – col. 5 line 3. The content element is an element of the master file by default since there is only one copy of the document. Brown teaches a simultaneous multi-user document editing system which does employ a master file and user local copy files. Brown teaches obtaining an initial up-to-date local copy of the document, receiving one or more Update messages, and obtaining an up-to-date copy of the document to update the local copy to an up-to-date condition in fig. 2.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined Brown into Bray to have created the claimed invention. It would have been obvious and desirable to have used a master copy/local user copy system as taught in Brown to have enhanced the simultaneous multi-user document editor of Bray so that users edited a local copy of a locked content group and then copied the changes to the master copy after completing editing and releasing the lock on the content. After the master copy is altered, the updated contents would have then been sent to the other users so that all clients would have had an up-to-date view of the document. This modification would have enhanced the file recovery and protected from file corruption in the event of system failure as is taught by Brown in col. 4 lines 35-39.

Regarding dependent claim 11, Bray teaches transmitting a Request lock message identifying the selected container to the workspace server and receiving a Lock Confirmed message from the workspace server in col. 6 line 60 – col. 7 line 67.

Regarding dependent claim 12, Bray teaches wherein the first user is allowed to select additional sections of the document and wherein a lock is obtained for selected containers corresponding to the additional section in col. 4 line 53 – col. 5 line 3 and col. 6 line 60 – col. 7 line 67. Bray does not teach wherein all the containers are posted to the workspace server because the user directly modifies the content in Bray. Brown does teach posting edited content to the workspace server in fig. 2.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined Brown into Bray to have created the claimed invention. It would have been obvious and desirable to have used a master copy/local user copy system as taught in Brown to have enhanced the simultaneous multi-user document editor of Bray so that users edited a local copy of a locked content group and then copied the changes to the master copy after completing editing and releasing the lock on the content. After the master copy is altered, the updated contents would have then been sent to the other users so that all clients would have had an up-to-date view of the document. This modification would have enhanced the file recovery and protected from file corruption in the event of system failure as is taught by Brown in col. 4 lines 35-39.

Regarding dependent claim 13, Bray teaches wherein the locked containers correspond to contiguous sections of the document in col. 4 line 53 – col. 5 line 3 and col. 6 line 60 – col. 7 line 67.

Regarding dependent claim 14, Bray teaches wherein steps (a) to (d) of claim 8 are performed independently in respect of a second user, and wherein, in respect of the second user, during step (c) the second user is not permitted to select the section of a document that

Art Unit: 2176

corresponds to a container locked in respect of the first user in step (c) in col. 4 line 53 – col. 5 line 3 and col. 6 line 60 – col. 7 line 67.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Adams, US 5,781,732 patented 7/14/1998 discloses a framework for constructing shared documents that can be collaboratively accessed by multiple users. Devanbu, US 6,681,371 B1 filed 12/21/1999 discloses using container documents as multi-user domain clients. Barlow et al., US 6,275,935 B1 filed 4/17/1998 discloses locking interactive objects to prevent unauthorized modification of interactive objects. Sato et al., US 6,757,871 B1 filed 6/5/2000 discloses a common document editing system. Shi et al., US 5,623,659 patented 4/22/1997 discloses a parent/child subset locking scheme for versioned objects. Tabuchi, US 6,446,093 B2 filed 2/13/1998 discloses a document sharing management method for a distributed system. Plantz et al., US 6,088,702 filed 2/25/1998 discloses a group publishing system. Bates et al., US 6,049,334 filed 12/20/1993 discloses graphically indicating the activity of a plurality of users within a shared data collection. Madduri, US 5,526,524 patented 6/11/1996 discloses the management of locked objects in a computer supported cooperative work environment. Nitta et al., US 5,287,521 patented 2/15/1994 discloses releasing and obtaining shared and exclusive locks. Lo et al., US 6,212,534 B1 filed 5/13/1999 discloses facilitating collaboration in connection with generating documents among a plurality of operators using networked computer systems. Hajmiragha, US 6,289,460 B1 filed 12/6/1999 discloses allowing predesignated users at remotely located computer-based systems to perform document management. Serbinis et al.,

Art Unit: 2176

US 6,314,425 B1 filed 8/17/1999 discloses the use of access tokens in an Internet document management system.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter J Smith whose telephone number is 571-272-4101. The examiner can normally be reached on Mondays-Fridays 7:00am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph H Feild can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PJS
October 29, 2004


JOSEPH FEILD
SUPERVISORY PATENT EXAMINER